

FOLDING STRUCTURE OF A FOLDABLE FRAMEWORK

RELATED U.S. APPLICATIONS

Not applicable.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable.

REFERENCE TO MICROFICHE APPENDIX

Not applicable.

FIELD OF THE INVENTION

[0001] The present invention relates generally to a foldable framework, and more particularly to a folding structure of the foldable framework.

BACKGROUND OF THE INVENTION

[0002] The conventional foldable framework has a folding structure comprising a plurality of component parts which must be separated from the main body of the foldable framework in the wake of the folding of the framework. The component parts of the folding structure are thus vulnerable to loss or misplacement.

BRIEF SUMMARY OF THE INVENTION

[0003] The primary objective of the present invention is to provide a foldable framework with a folding structure which is free of the shortcoming of the conventional folding structure described above.

[0004] In keeping with the principle of the present invention, the foregoing objective of the present invention is attained by the foldable framework comprising four upright support rods and a plurality of horizontal support rods which are fastened at two ends with two upright support rod and are provided at a midpoint thereof with a movable joint enabling the horizontal support rods to be folded. As the horizontal support rods are folded, the upright support rods are drawn together. When the horizontal support rods in the folding state are unfolded, the upright support rods in the folding state are forced to unfolded.

[0005] The features and the advantages of the present invention will be more readily understood upon a thoughtful deliberation of the following detailed description of the present invention with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0006] FIG. 1 shows a perspective view of a foldable framework of the present invention.

[0007] FIG. 2 shows an enlarged schematic view of a movable joint of the present invention.

[0008] FIG. 3 shows a side schematic plan view of the present invention as shown in FIG. 1.

[0009] FIG. 4 shows a schematic view of the folding of the foldable framework of the present invention.

[0010] FIG. 5 shows a perspective view of the foldable framework of the present invention in the folding state.

[0011] FIG. 6 shows a perspective view of a foldable computer desk serving as an example of application of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0012] As shown in FIGS. 1-5, a foldable framework of the present invention comprises two first upright rods 11, two second upright rods 12, two top horizontal rods 13, two first shelf rods 21, and two second shelf rods 22. The two top horizontal rods 13 are fastened with the top ends of the upright rods 11 and 12 and are provided with a net 14 fastened therewith.

[0013] The features of the present invention are the shelf rods 21 and 22, which are horizontally fastened with the upright support rods 11 and 12 and are provided with a movable joint 23, 24. The movable joints 23 and 24 are respectively disposed at a midpoint of the horizontal shelf rods 21 and 22.

[0014] As the horizontal shelf rods 21 and 22 are folded at the movable joints 23 and 24, as illustrated in FIG. 4, the upright support rods 11 and 12 are drawn together, as illustrated in FIGS. 4 and 5. The folded framework of the present invention is unfolded by pulling the upright support rods 11 and 12 apart until the horizontal shelf rods 21 and 22 are completely unfolded. It is therefore readily apparent that the folding structure of the framework of the present invention is not only simple in construction but also free of the shortcoming of the conventional folding structure.

[0015] The folding structure of the present invention comprises a connection rod 30 which is pivotally fastened between the two movable joints 23 and 24. The connection rod 30 is provided at

a U-shaped end 31 thereof with a stop portion 25 serving to locate the shelf rod 21. The connection rod 30 has a T-shaped end 32 which is opposite to the U-shaped end 31 and is provided with a stop portion 26 serving to locate the shelf rod 22.

[0016] The U-shaped end 31 of the connection rod 30 is provided with a V-shaped brace 40, which is pivotally fastened with the upper shelf rod 21 and is provided at a closed end with a guide pin 41. The connection rod 30 is provided in proximity of the U-shaped end 31 with a confinement through slot 33 in which the guide pin 41 of the V-shaped brace 40 is slidably located.

[0017] As illustrated in FIG. 6, the folding structure of the present invention is incorporated into a computer desk 50 comprising a top shelf 51 and a base 52.

[0018] The embodiments of the present invention described above are merely illustrative. Accordingly, the present invention may be embodied in other specific forms without deviating from the spirit thereof. The present invention is therefore to be limited only by the scopes of the following claims.